

## **REMARKS**

Claims 1-14 and 17-39 are currently pending in the application. Claims 27 and 28 are rewritten in independent form. The amendments represent no alteration of claim scope, and no new matter is added. Reconsideration and further examination is requested.

### **Claim Rejections Under 35 U.S.C. § 112, First Paragraph**

Claims 40-43 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claims 40-43 are canceled, rendering the rejection moot.

### **Double Patenting**

Claims 1-39 are rejected under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Pat. No. 6,503,748 (“the ’748 patent”).

The Office Action states that the polynucleotides of the ’748 patent “anticipate” the present claims. However, the ’748 patent contains only a single sequence, SEQ ID NO:1, which is identified therein as the sequence of the endogenous plasmid of NRRL Deposit No. B-30035. That sequence is not presently claimed.

The present application, in contrast, discloses four sequences, (a) the nucleotide sequence of the replicon found in the endogenous plasmid (SEQ ID NO:1), (b) the nucleotide sequence of the endogenous plasmid (SEQ ID NO:2; equivalent to SEQ ID NO:1 of the ’748 patent), (c) a shuttle vector plasmid contained in a different NRRL Deposit (SEQ ID NO:3), and (d) a nucleotide sequence that supports plasmid vector replication in *Ketogulonigenium* host species (SEQ ID NO:4). SEQ ID NO:2, the only sequence in the present application that corresponds to the sequence in the ’748 patent, is not claimed in the present application. The polynucleotide disclosed in the ’748 patent therefore cannot anticipate the current claims, because that polynucleotide is nucleotide currently claimed.

Furthermore, applicant respectfully submits that the claims of the present application are patentably distinct from the claims of the ’748 patent. Independent claim 1 and dependent claims 2-7 of the ’748 patent claim an isolated or purified nucleic acid molecule that includes a

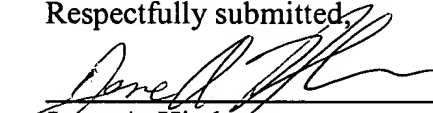
polynucleotide sequence at least 95% identical to (a) the nucleotide sequence of SEQ ID NO:1, (b) a nucleotide sequence of an endogenous plasmid contained in Deposit NRRL B-30035, or (c) the complement of (a) or (b). Independent claim 8 and dependent claims 9-25 claim an isolated or purified vector that includes a DNA sequence that is at least 95% identical to (a) SEQ ID NO:1, (b) the sequence of the endogenous plasmid contained in Deposit B-30035, or (c) the complement of (a) or (b).

In contrast, the claims of the present application recite an isolated or purified nucleic acid molecule containing a *Ketogulonigenium* plasmid replicon found in Deposit No. NRRL B-30035. The claims of the '748 patent do not mention replicons, nor are replicons discussed in the specification of the '748 patent. Where a reference fails to even mention the claimed subject matter, that reference cannot serve as a basis for rendering that subject matter obvious, let alone anticipated.

Applicant therefore respectfully requests that the rejection on this basis be reconsidered and withdrawn.

Applicant submits that all of the claims are now in condition for allowance, which action is requested. Please apply any charges or credits to Deposit Account No. 11-1110.

Respectfully submitted,



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